SY-KT333 DRAGON Plus Motherboard

Quick Start Guide



Congratulations on your new purchase of SOYO KT333 DRAGON Plus motherboard for the AMD platform!

This new motherboard offers support for ultra fast DDR400 memory. However, since DDR400 is not a JEDEC (The Joint Electron Device Engineering Council) approved memory specification, some users might experience DDR400 incompatibilities as a result of discrepancy in memory manufacturing.

In an effort to provide our customers the highest product quality and performance, SOYO has tested a number of memory modules to ensure compatibility. Please visit our web site at http://www.soyousa.com/products/proddesc.php?id=189 for information on Recommended Memory.

In some cases BIOS upgrade might be required to take advantage of this new feature. Please refer to our Support section on the web site for more information.

SY-KT333 DRAGON Plus Motherboard

AMD[®] K7 Athlon & Duron processors VIA KT333CF AGP/PCI Motherboard 100/133 MHz Front Side Bus supported ATX Form Factor

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About This Guide:

This Quick Start Guide can help system manufacturers and end users in setting up and installing the motherboard. Information in this guide has been carefully checked for reliability; however, to the correctness of the contents there is no guarantee given. The information in this document is subject to amend without notice

For further information, please visit our **Web Site** on the Internet. The address is

"http://www.soyo.com.tw".

KT333 DRAGON Plus Serial - Version 1.1- Edition: January 2003

* These specifications are subject to amend without notice

1 Introduction

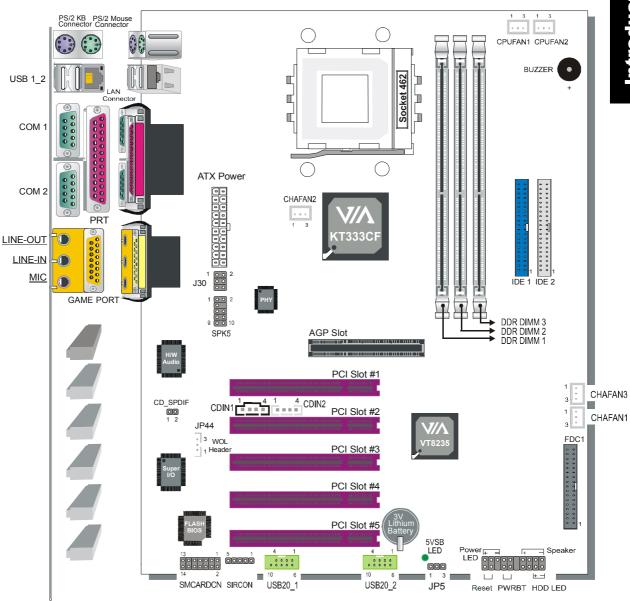
Congratulations on your purchase of the **SY-KT333 DRAGON Plus** motherboard. This *Quick Start Guide* illustrates the steps for installing and setting up your new motherboard.

This guide provides all users with the basic steps of motherboard setting and operation. For further information, please refer to the SY-KT333 DRAGON Plus motherboard User's Manual that came with your motherboard.

Unpacking

When unpacking the motherboard, check for the following items: The SY-KT333 DRAGON Plus AGP/PCI Motherboard The user manual The Installation CD-ROM SOYO Bonus Pack CD-ROM One IDE Device ATA 66 Flat Cable One Floppy Disk Drive Flat Cable One Heat Sink Compound One SPDIF Audio Connector Card (optional) One Back Panel

SY-KT333 DRAGON Plus Motherboard Layout



Key Features

- Supports Socket A AMD® K7 processors
 - Supports 200/266/333 MHz Front Side
 Bus Athlon /XP CPU (750MHz ~ 2600+)
 - DuronTM /Morgan CPU (650MHZ ~ 1.3GHz)
- Supports 200/266/333 DDR (Double Data Rate) module
- ➤ Audio chip supports 2/4/5.1 channel speaker
- Support SP/DIF Audio connector for 5.1 channel support. (optional)
- ➤ PC99, ACPI
- Ultra DMA 33/66/100/133 (ATA 33/66/100/133)
- Supports Wake-On-LAN (WOL)
- Power-on by modem and alarm and PS/2 Keyboard
- Supports onboard hardware monitoring
- Easy CPU settings in BIOS with the "SOYO COMBO Setup"
 - CPUFSB frequency
 - CPU multiplier
 - CPU Vcore voltage
 - -DDR RAM Clock
 - DDR Voltage
 - -AGP Voltage

- Supports suspend to RAM (STR)
- Supports 5 sets of voltage monitoring
- On-board hardware audio
- Power failure resume
- Supports multiple-boot function
- Smart Card Reader
 - Compliant with Personal Computer Smart Card (PC/SC) Working Group standard
 - Compliant with smart card (ISO 7816) protocols
 - Supports card present detect
 - Supports Smart Card insertion power-on feature
- > 1x lrDAport
- > 3 x DIMM slots for DDR RAM memory
- > 5 x 32-bit bus master PCI slots
- > 1 x AGP slot (support 4X with 1.5 volts only)
- 6x USB ports onboard
- ATX power connector

2 Installation



To avoid damage to your motherboard, please follow these simple rules while handling this equipment:

- Before handling the motherboard, ground yourself by touching on to an unpainted portion of the system's metal chassis.
- Remove the motherboard from its anti-static packaging. Hold the motherboard by the edges and avoid touching its components.
- Check the motherboard for damage. If any chip appears to be loose, press carefully to seat it firmly in its socket.

Follow the directions in this section, which is designed to guide you through a quick and correct method to install your new **SY-KT333 DRAGON Plus** motherboard. For detailed information, please refer to the SY-KT333 DRAGON Plus motherboard User's Manual and Technical Reference online manual on the CD-ROM package that came with your motherboard.

Gather and prepare all necessary components to complete the installation successfully:

- Socket A processor with built-in CPU cooling fan (boxed type)
- ◆ DDR RAM module(s)
- ◆ Computer case with adequate power supply unit
- Monitor
- PS/2 Keyboard
- ◆ Pointing Device (PS/2 Mouse)
- Speaker(s) (optional)
- Disk Drives: HDD, CD-ROM, Floppy drive...
- External Peripherals: Printer, Plotter, and Modem (optional)
- Internal Peripherals: Modem and LAN cards (optional)

Note: If you want to use an external speaker connected to "Line-out" port, please make sure to use an "amplified speaker" that can generate proper output sound volume.

We will now begin the installation process. Please follow the step-by-step procedure designed to lead you to a complete and correct installation.

Step 1- Install the Central Processing Unit (CPU)

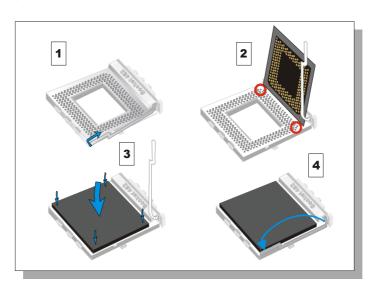
Step 2- Install memory modules

Step 3- Install expansion cards

Step 4- Connect cables, case wires, and power supply

Step 1. Install the CPU

 $CPU\ Mount\ Procedure$: To mount the AMD®K7 Athlon & DuronTM processor that you have purchased separately, follow these instructions.



- 1. Lift the socket handle up to a vertical position.
- 2. Align the blunt edge of the CPU with the matching pinhole edge on the socket.
- 3. Seat the processor in the socket completely and without forcing.
- 4. Then dose the socket handle to secure the CPU in place.



Remember to connect the CPU Cooling Fan to the appropriate power connector on the motherboard. The fan is a key component that stabilizes the system. It prevents the equipment from overheating and prolongs the life of your CPU.

CPU Fan Installation

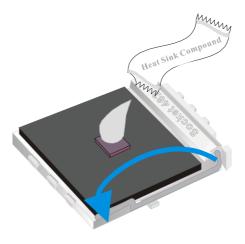
Your Socket A processor kit comes with a cooling fan. Mount the fan on the processor according to the instructions provided by the manufacturer. The fan is a key component that will ensure system stability. The fan prevents overheating, therefore prolonging the life of your CPU.



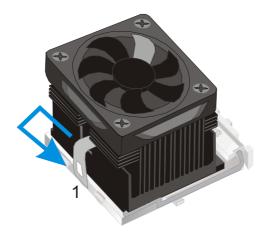
Note: Remember to connect the fan to the appropriate power source.

CPU Fan Mount Procedure: To prevent scratch or damage on the motherboard, please follow the instructions on how to mount the CPU fan property.

1. Apply thermal paste to the die of the CPU.



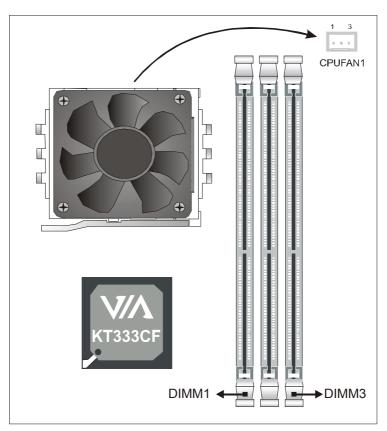
2. Carefully mount the fan on top of the CPU and dip-on the first lock.



3. Clip-on the second lock and please make sure not to damage/scratch the board.



4. Connect the power connector to CPUFAN1.



Note: If the fan is defective or Power connector is not connected to CPUFAN1, the system will enable Fan Off Control function. See below for more information on FOC function.

When the CPU temperature exceeds, the temperature set in the CPU Temp. Protection in the BIOS setup, SOYO's Anti burn Regulator (ABR) will automatically shutdown the system and beep until the power button is press for one time.

FOC (Fan-Off Control)

The newly designed SOYO "FOC" is based on the concept of total protection for CPU, which is very different from currently seen on the market. The H/W control function is used to see a passive security system of monitoring and warning. S/W Simultaneous Signal Follow-ups techniques and Auto Power Off System are included to prevent all possible damage caused by the malfunctioning of the CPU fan. With the help of "O/S On Time Monitoring And Warning" function, provided by the H/W monitoring system, the double-protection purpose is achieved.

"FOC" includes the following functions:

- (1) Simultaneous Signal Follow Ups: Before the system enters the O/S, H/W will detect the signals of the CPU fan pins, get their revolution information and send it to the BIOS.
- (2) Auto Power Off System: If the BIOS receives the information of CPU fan revolution, it continues to function normally. If no signal is received, it will inform the system and disconnects the power supply immediately to protect the CPU from overheating.

Note: The following must be observed to secure the normal functioning of "Fan-Off Control":

1. FOC only works on CPUFAN 1.

- 2. CPU fan with sensor pins must be used.
- 3. CPU fans approved by AMD are strongly recommended.

The "HOT KEY" function is provided for the CPU fans without sensor pins, to avoid the power off. Users may press the "Insert" key to jump over the "Power Off" mode; go to the BIOS and disable "FOC". Now system can be booted normally.

We provide the following User-Friendly protection features:

- Fan-Off Control: The motherboard detects the status of the CPU fan and protects the CPU by automatically disconnecting the power supply. The default value of this function is Enable. After booting up, the user may disable it.
- 2. Heat Dissipation Paste: Heat Dissipation Paste is included for all Socket-A motherboards, to enhance the heat dissipation capability.

Furthermore, we strongly recommend our users to enable the function of H/W monitoring in the BIOS. This function, together with the FOC, provides the total protection to the CPU and allows it to maximize its performance.

Note: FOC will only work during BOOT-up. Once the system enters the operating system, FOC will be disable.

ABR (Anti Burn Regulator)

SOYO's ABR (Anti Burn Regulator) is specially designed hardware circuits that works hand in hand with the CPU's internal sensor in monitoring the temperature of the CPU and prevent it from overheating.

Once the heat accumulated in the CPU is over the set limit. ABR will automatically shut down the system power and warns you with a beeping sound. To de-activate the beeping sound, **un-plug the AC power cord.** We recommend you to check the cause of the overheating and let the processor cool down before powering on the system.



Note: ABR supports AMD Athlon XP and Morgan CPU. Thunderbird and Duron CPU is not supported

Step 2. Configure Memory

Your board comes with three DIMM sockets, providing support for up to 3GB of main memory using unbuffered and non-ECC DIMM modules from 64MB to 1GB. On this motherboard, DRAM speed can be set independent from the CPU front side bus speed. Depending on the DRAM clock speed setting in the BIOS setup, appropriate memory modules must be used. For 100MHz DRAM speed, use PC1600 memory; for 133MHz DRAM speed, use PC2100 memory; for 166 MHz DRAM speed, use PC2700 memory.

Memory Configuration Table

Number of Memory Modules	DIMM 1	DIMM 1 DIMM 2 DIMM 3						
RAM Type	DDR RAM (non-register & non-ECC)							
Memory Module Size (MB)	12	128/256/512/1024 MB						

Step 3. Install Expansion Card

The motherboard has 1 AGP slot and 5 PCI slots

- Read the related expansion card's instruction document before inserting the expansion card into the computer.
- 2. Press the expansion card firmly into expansion slot in motherboard.
- 3. Be sure the metal contacts on the card are indeed seated in the slot.
- 4. Replace the screw to secure the slot bracket of the expansion card.
- 5. Install related driver from the operating system.



Note: AGP card with 3.3 volts is not supported. Only AGP card with 1.5 volts can be used in this M/B.

Step 4. Connections to the Motherboard

This section tells how to connect internal peripherals and the power supply to the motherboard.

The internal peripherals consist of IDE devices (HDD, CD-ROM), Floppy Disk Drive, Chassis Fan, Front Panel Devices (Internal Speaker, Reset Button and IDE LED Switch.), Wake-On-LAN card, VGA card and other devices.

For more details on connecting internal and external peripherals to your new SY-KT333 DRAGON Plus motherboard, please refer to SY-KT333 DRAGON Plus motherboard User's Manual and Technical Reference online manual on the CD-ROM.

Connectors and Plug-ins

Wake-On-LAN Header: JP10						Standard IrDA (Infrared Device Header): SIRCON														
Pir	າ1	Pir	2	Pin3				Pin1 Pin2			in2	Pin3			Pin4			Pin5		
5V3	SB	GN	ID	М	P-Wa	akeup	١	VCC		Ν	IC	i if		(GND	ND		IRTX	
MIC & LED Connector: J30							130	CD_SPDIF												
Pin	1	Pin2		Pin:	}	Pin	4		Pin5		Pin	6		Pin1 Pin2			n2			
Line_C	Out_L	Line_Ou	t_R	MIC	MIC IN GN			LAN	N_LINK_LED			VC	VCC S			SPDIF IN2			GND	
							SIV	ICAF	RDC	N										
Pin1	Pin2	Pin3	Pin	4 Pin	Pin5 Pin6 Pin7			Pi	n8	Pin9 Pir		Pin10	0 Pin11		Pin12		Pin1	3	Pin14	
VCC	NC	NC	NC	Sar	et	RST	CLK	N	С	NC	,	Sario	Scrio GN		Scrpres		NC	,	NC	
SPK 5																				
Pin	1	Pin2		Pin3	Pin4 Pin5 Pin6 Pin7		7	Pin8 P		Pir	n9	F	Pin10							
SPDIF	OUT	SPDIF II	V1	+5VA	Ν	IC C	enter(TUC	B	ASSOUT GND			D	GND RE		REA	AR_R		EAR_L	
							U	JSB2	0_1											
Pin	1	Pin2)	Pir	13	F	in4	Pin6			Pin7		Pin8		Pi	Pin9		Pin10		
Pow	<i>v</i> er	Data((-)	Dat	a(+)	G	ND		Pov	<i>v</i> er	С	ata(-)	(-) Data(+)			GND		(GND	
				1			U	JSB2	0_2											
Pin	1	Pin2	Pin2 Pin3 Pin				in4		Pin	6		Pin7	n7 Pir		Pin8 F		Pin9		Pin10	
Pow	<i>v</i> er	Data((-)	Dat	Data(+) GND Power Data(-) Data(+)						Gl	ND GND								
CPU Cooling Fan: CPUFAN1							CPU Cooling Fan: CPUFAN2													
F	Pin1	Pin2 Pin3					3		Pin1				Pin2				Pin3			
(SND	ND 12V SENSOR GND 12V NC																		
Chassis Fan: CHAFAN1						Chassis Fan: CHAFAN2/3														
	Pin1			in2		Pir	3			Pin1			I	Pin2				Pin3		
CO	NTROL	OL 12V SENS				SOR		GND				12V				NC				

	OD IN ODIN	IA / ODINIO					in1	D'-0	D'-0	D'. 4	
CD-IN: CDIN1/CDIN2								Pin2	Pin3	Pin4	
Connect the CD	M	CDIN1			L	G	G	R			
device to the matching connector CDIN					CDIN2		G	L	G	R	
	Power LED Power LED										
Power LED	Р			Pin:	2	Pin3					
+ -	V	VCC			NC	;	GND				
	Speaker										
1 1	+ -	Pin1		Pir	12		Pin3	Pin4			
Reset PV	DD LED	VCC		NC			NC	Speaker out			
HDD	LED		PWRB	T		RESET					
Pin1	Pin2		Pin2			Pin1		Pin2			
LEDAnode	LED Anode LED Cathode Power On						Cor	ntrol PIN	GND		
		ATXP	ower On/C)ff: P	WRBT	1					
Connect your power switch to this header (momentary switch type). To turn off the system, press this switch and hold down for longer than 4 seconds.											
ATX Power Supply: ATX PW											
Attach the ATX Power cable to this connector. (This motherboard requires an ATX power supply, an AT power supply can NOT be used.)											
When using the Power-On by PS/2 Keyboard function, please make sure the ATX power supply is able to provide at least 720mA on the 5V Standby lead (5VSB) in order to meet the standard ATX specifications.											

CMOS Clear (JP5)

In some cases the CMOS memory may contain wrong data, follow the steps below to clear the CMOS memory.

- 1. Put the jumper back to 1-2 to allow writing of new data into the CMOS memory.
- 2. Clear the CMOS memory by momentarily shorting pin 2-3 on jumper JP5. Its white cap can easily identify this jumper.

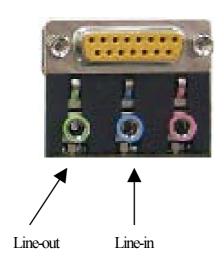
CMOS Clearing	Retain CMOS	Data	Clear CMOS Data					
JP5 Setting	Short pin 1-2 to retain new settings	1 2 3	Short pin 2-3 for at least 5 seconds to clear the CMOS	1 2 3				

Note: You must unplug the ATX power cable from the ATX power connector when performing the CMOS Clear operation.

Audio Speakers connections

When using 2 channel speaker, connect the speaker cable to line-out.

If you're using 4 channel speaker, connect the front L/R speakers to line-out and rear L/R speakers to Line-in, make sure to set the audio software for 4 channel speaker system. Don't forget to set the Audio Rack software to 4 channel system.



Audio Upgrade

The standard configuration of KT333 DRAGON Plus motherboard supports 2 or 4-channel audio. To upgrade your DRAGON Plus on-board audio to 5.1-channel and enjoy digital sound quality, simply add a SPDIF audio connector to the motherboard.

For more information on purchasing a compatible SPDIF audio connector, please go to the SOYO e-Store at www.soyousa.com/commerce

3 Quick BIOS Setup

This motherboard does not use any hardware jumpers to set the CPU frequency. Instead, CPU settings are software configurable with the BIOS **[SOYO COMBO FEATURE]**. The [SOYO COMBO FEATURE] combines the main parameters that you need to configure, all in one menu, for a quick setup in BIOS.

After the hardware installation is complete, turn the power switch on, then press the **** key during the system diagnostic checks to enter the Award BIOS Setup program. The CMOS SETUP UTILITY will be shown on the screen. Then, follow these steps to configure the CPU settings.

Step 1. Select [STANDARD CMOS SETUP]

Set [Date/Time] and [Floppy drive type], then set [Hard Disk Type] to "Auto".

Step 2. Select [LOAD OPTIMIZED DEFAULTS]

Select the "LOAD OPTIMIZED DEFAULTS" menu and type "Y" at the prompt to load the BIOS optimal setup.

Step 3. Select [SOYO COMBO FEATURE]

Set the [CPU Frequency Mode] to manual to overdock your CPU.

To overclock your CPU's Front Side Bus, **[Frequency 1MHz Stepping]** enables you to overclock in 1MHz increment or you can input the desired FSB value of the CPU.

[CPU to PCI Divider] determines the speed of your PCI slot is at. The default should be /4 if your CPU FSB is 133MHz.

Set the **[DRAM Clock]** to 100/133/166/200 MHz or By SPD, depending on the DDR Clock. If you overclock your CPU's Front Side Bus, it overclocks your DDR Clock as well.

Note:



BIOS can auto detect the Front Side Bus of XP and Morgan CPU. If you have a 133MHz FSB Thunderbird CPU, you need to manually set the CPU Frequency mode in the BIOS.

DDRAM clock speed should not be lower than the CPU speed.

13.0x or above multiplier option in the **[CPU Ratio Select]** will only work with CPU with 13.0x or above multiplier

SOYO is not responsible for damage done in your CPU or system instability due to overclocking.

Step 4. Select [SAVE & EXIT SETUP]

Press **Enter**> to save the new configuration to the CMOS memory, and continue the boot sequence.

4 The SOYO CD



The SOYO-CD will Auto Run only in Windows Base Operating System.

Your SY-KT333 DRAGON Plus motherboard comes with a CD-ROM labeled "SOYO CD." The SOYO CD contains

- a. The user's manual for your new motherboard -in PDF format,
- b. The drivers software available for installation, and
- c. A database in HTML formats with information on SOYO motherboards and other products.

Step 1. Insert the SOYO CD into the CD-ROM drive

If you are running Windows NT/2K/XP, the SOYO-CD will not detect your motherboard type. In that case the following dialog will pop up. Please choose your motherboard model number and press OK.

Now the SOYO-CD Start Up Menu will come up as shown on the following page



(SOYO CD Start Up Program Menu)

Under Windows 95/98/ME, the SOYO CD Start Up Program automatically detects the SOYO motherboard the system uses and displays the corresponding model name.



The user's manual files included on the SOYO CD are in PDF (Postscript Document) format. In order to read a PDF file, the appropriate Acrobat Reader software must be installed in your system.

Note: The Start Up program automatically detects if the Acrobat Reader utility is already present in your system, and otherwise prompts you on whether or not you want to install it. You must install the Acrobat Reader utility to be able to read the user's manual file. Follow the instructions on your screen during installation, then once the installation is completed, restart your system and re-run the SOYO CD.

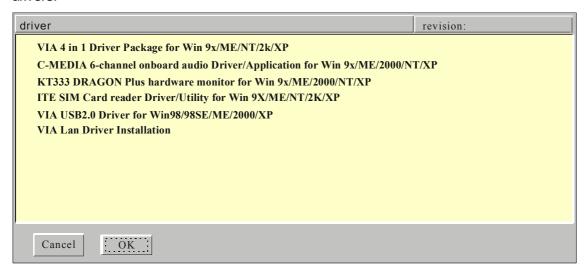
Step 2. Install Drivers and Utilities

The following drivers are to be installed in order for the system to operate properly

- 1. VIA4 in 1 driver.
- 2. C-Media 8738 audio driver. Only required if you are using the onboard audio.
- 3. VIAUSB 2.0 driver.
- 4. LAN driver. Need to be installed manually.

The rest of the available drivers are optional.

Click the *Install Drivers* button to display the list of drivers software that can be installed with your motherboard. The Start Up program displays the drivers available for the particular model of motherboard you own. We recommend that you only install those drivers.



(Driver Installation Menu)

A short description of all available drivers follows:

VIA 4 in 1 Driver Package for Win 9x/ME/NT/2k/XP

VIA 4 In 1 driver includes four system drivers to improve the performance and maintain the stability of systems using VIA chipsets. These four drivers are:

VIA Registry (INF) Driver, VIA AGP VxD driver, VIA ATAPI Vendor Support Driver and VIA PCI IRQ Miniport Driver. For Windows NT users, the VIA IDE Bus Mastering driver is the only driver to be installed in your system.

A description of 4 drivers follows:

— Bus Master PCI IDE Driver

The ATAPI IDE driver enables the performance enhancing bus mastering functions on ATA-capable Hard Disk Drives and ensures IDE device compatibility.

— AGP VxD Driver

VIAAGP VxD Driver is to be installed if you are using an AGP VGA device. VIAGART.VXD will provide service routines to your VGA driver and interface directly to hardware, providing fast graphical access.

— VIA Chipset Functions Registry

VIA Registry (INF) Driver is to be installed under Windows. The driver will enable the VIA Power Management function.

— IRQ remapping utility (This driver is installed automatically)

VIA PCI IRQ Miniport Driver is to be installed under Windows 98 only, it sets the system's PCI IRQ routing sequence.

C-MEDIA 6-channel Onboard Audio Driver/Application for Win 9x/ME/ 2000/NT/XP

- 1. The driver supports 2/4/6 speakers 3D positional audio.
- 2. The application is include *CD Player/MIDI Player/MP3/Wave Player/Mixer* with the control over your PC's audio functions.

KT333 DRAGON Plus hardware monitor for Win 9x/ME/2000/NT/XP

Your motherboard comes with a hardware monitoring IC. By installing this utility Temperature, Fan speed and Voltages can be monitored. It is also possible to set alarms when current system values exceed or fall below pre-set values.

ITE SIM Card Reader Driver/Utility for Win 9x/ME/NT/2000/XP

Install this driver if you have a card reader and a PC/SC compliant software. Com 2 in the BIOS setup should be set to "SCR".

VIA USB2.0 Driver for Win 98/98SE/ME/2000/XP

This setup program will install the driver for VIA USB 2.0 Host Controller.

Select which driver you want to install and dick **OK**, or dick **Cancel** to abort the driver installation and return to the main menu.

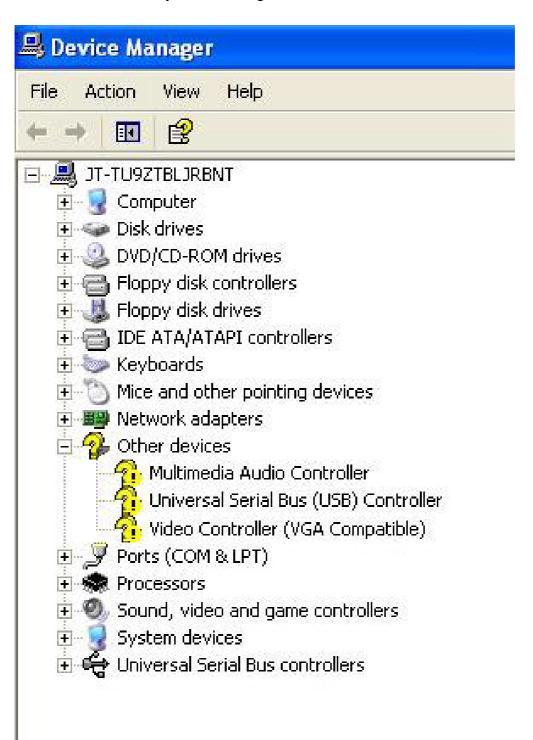
Note: Once you have selected a driver, the system will automatically exit the SOYO CD to begin the driver installation program. When the installation is complete, most drivers require to restart your system before they can become active.

Step 3. Check the Latest Releases

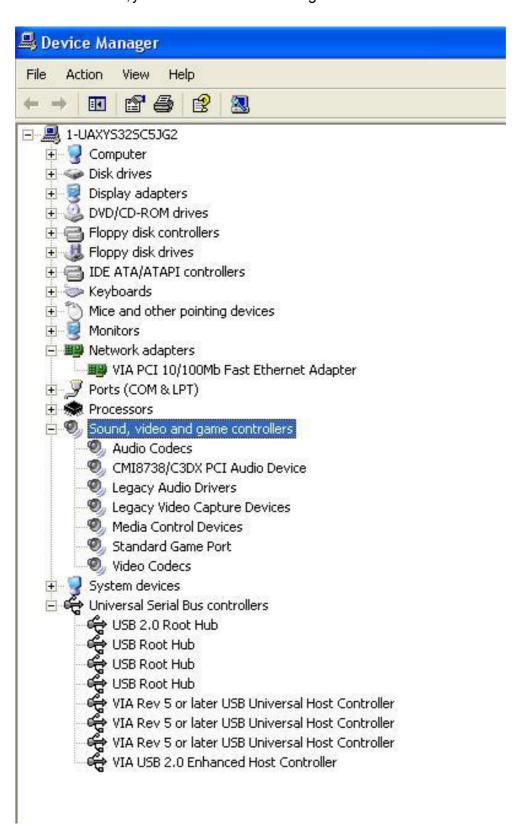
Click the 'Check the latest Releases' button to go the SOYO Website to automatically find the latest BIOS, manual and driver releases for your motherboard. This button will only work if your computer is connected to the internet through a network or modem connection. Make sure to get your modem connection up before dicking this button.

(* Internet Explorer is a Microsoft Trademark)

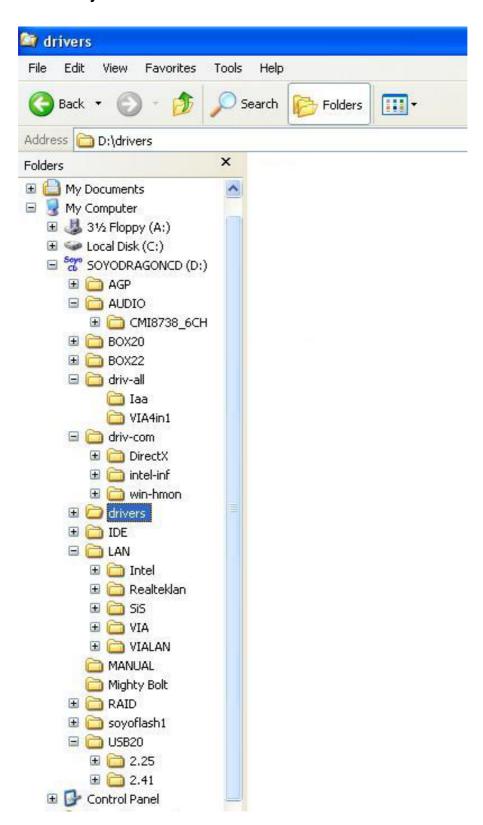
After Windows XP installation, your device manager should look like this:



After driver installation, your Windows XP device manager should look like this:



Drivers directory list in the CD driver



5 Audio Driver Installation

Audio Driver Installation for Windows 98/98se

After you have installed the audio driver, windows may prompt you to restart your computer.

When your computer restarted it may look for windows driver from your Win98CD and ask you to insert your Win98/98se CD to your CD-drive. At this point you need to insert the Win98 CD to your CD-drive and type in D:\win98 (assuming your CD-ROM in driver D).

6 VIA LAN Driver Installation

Installing the VIA LAN Drivers under Windows 98SE

- 1. Move the cursor to my computer icon.
- 2. Click mouse right button then select "properties".
- 3. Click "Device Manager", then click "other devices".
- 4. Select "PCI other net controller", then Double click it.
- 5. You will see the "Driver" item above this window, then click it.
- 6. Click on "Update Driver".
- 7. Click on "Next".
- 8. Select the following directory.
- 9. The directory is in SOYO CD "D:\LAN\VIALAN" (where D: is your CD-ROM) then click ok and you will need windows 98 second Edition CD to complete the installation, put it in your CD-ROM.
- 10. After informing windows of the driver directory the driver will be installed Restart your system after installation.

Installing the VIA LAN Drivers under Windows ME

- 1. Move the cursor to my computer icon.
- 2. Click mouse right button then select "properties".
- 3. Click "Device Manager", then click "Network adapters".
- 4. Select "VIA LAN driver", then Double click it.
- 5. You will see the "Driver" item above this window, then click it.
- 6. Click on "Update Driver".
- 7. Click on "Next".
- 8. Select the following directory.
- 9. The directory is in SOYO CD "D:\LAN\VIALAN" (where D: is your CD-ROM) and click ok.
- 10. After informing windows of the driver directory the driver will be installed Restart your system after installation.

VIA LAN Driver nstallation

Installing the VIA LAN Drivers under Windows NT

- 1. Double click the Network icon in the control panel then click "Yes".
- 2. Click on "Next".
- 3. Click on "Select from list".
- 4. Click on "Have Disk".
- 5. The install Driver dialog box will appear and request the path of the location of the drivers to be installed. Enter "D:\LAN\VIALAN" (where D: is your CD-ROM) then press "ok".
- 6. You will need the Windows NT CD to complete the installation.
- 7. After informing Windows NT will display a dialog box asking your to restart your system, click "Yes" right now.

Installing the VIA LAN Drivers under Windows 2000

- 1. Move the cursor to my computer icon.
- 2. Click mouse right button then select "properties".
- 3. Select "Hard ware" item, click it.
- 4. Select "Device Manager", click it.
- 5. Under other device you will see a yellow Mark, then Double click "Ethernet controller".
- 6. Click on "Reinstall Driver".
- 7. Click on "Next".
- 8. Click on "Next".
- 9. The LAN driver directory is in SOYO CD "D:\LAN\VIALAN". (where D: is your CD-ROM)

VIA LAN Driver

Installing the VIA Onboard LAN Drivers under Windows XP (Because Windows XP can detect VIA LAN driver automatic, so this installation is for updating LAN driver)

- 1. Move the cursor to my computer icon.
- 2. Press mouse right button select "properties", then click it.
- 3. Click "Hardware", then click Device Manager".
- 4. Double click "Network adapters".

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- 5. Double click "VIA PCI 10/100Mb Fast Ethernet Adapter".
- 6. Click "Driver".
- 7. Click "Update Driver".
- 8. Select "Install from a list or specific locations", click it.
- 9. Click on "Next".
- 10. Click "Browse"
- 11. The LAN driver directory is in SOYO CD "D:\LAN\VIALAN" (where D: is your CD-ROM), then press "ok".

Quick Trouble shoot tips

Boot-up Issues

The system do not power-up, no beeping sound heard and the CPU fan does not turn on.

- 1. Check if the power cord is plug to the power source.
- 2. Check if the power is connected to the M/B.
- 3. Check if the cable of the case power button is connected to the M/B power button connector (see connectors and plug-ins in the manual for more info).
- 4. Make sure the power supply is not defective. Change the power supply. The minimum should be 250 watts.
- 5. Remove the M/B from the case and test the system. The M/B might be shorted to the case.

The system power-up, no video, no beeping sound heard, but the CPU fan is turning.

- Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
- 2. Check all the jumper settings on the M/B. (if the M/B have any).
- 3. Check if the CPU is ok by using another CPU (check the Quick start guide for CPU supported on this M/B).
- 4. Check if the power supply is ok. The minimum should be 250 watts.
- 5. Make sure the CPU fan is connected to CPUFAN1 connector.
- 6. Remove the M/B from the case and test the system. The M/B might be shorted to the case.

The system power-up, no video, beeping heard.

- Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
- 2. Check all the jumper settings on the M/B. (if the M/B have any).
- 3. Check the memory module and the VGA card if inserted properly on the M/B.
- 4. If yes, change the memory module, it might be defective. Make sure the memory specification is supported by the M/B. (for more info on this, check our FAQ website).
- 5. Change the VGA card.

The system turns on for some seconds then shutdown by itself.

- 1. Check if the CPU fan is connected to the CPUFAN1 connector.
- 2. The CPU might be overheating. Check the CPU FAN if it is defective or see if the CPU fan is in contact with the CPU.
- 3. Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).

- 4. Make sure the power supply you have on your system support the M/B specification. Example. If you have a P4 M/B, you need to use a P4 power supply.
- 5. If you already checked the power supply specification, change the power supply it might be defective. The minimum is 250 watts.

When I boot up my system, everything works fine, it sees my CPU and memory, detects my hard drive, floppy drive and CD-ROM but locks up at "Verify DMI pool data...". Don't go any further. What should I do?

- Clear CMOS battery. (JP5 connector, see Quick start guide for more info on how to clear the CMOS).
- 2. If still has the problem, remove all other add-on cards except video card see if it move further. Then put peripherals in one by one to identify which one cause the lockup.
- 3. Change the CPU.

During Boot-up, my computer says CMOS memory Checksum error. What is the problem?

- 1. Clear CMOS memory.
- 2. Re-flash BIOS. Check on how to flash BIOS on the later part of this book.
- 3. Change the CMOS battery, the battery might be drained.
- 4. The BIOS chip might be failing.

I hear 1-2 beeping sound and then the system shutdown, what is the problem?

Make sure to connect the CPU fan to CPUFAN1 connector.

Stability Issue

My system intermittently locks up, very unstable

- 1. Check the CPU Temp, it might be overheating. Change the CPU FAN.
- 2. Do not over clock your CPU
- 3. Check the specification of the memory module, maybe the M/B do not support it.
- 4. Go to BIOS setup and load fail safe settings. Please check if the system performance in the BIOS setup is set to Turbo/Maximum.
- 5. Check website for latest BIOS update.
- 6. Check website for FAQ's regarding instability issue.
- 7. Change the memory module or CPU.
- 8. The power supply might not have enough wattage to support all the peripherals. If your system has other peripherals connected, like CD-RW, extra HDD, etc. disconnect them.
- 9. Install VIA4 in 1 driver.

My system intermittently locks up, during Windows installation.

- 1. Go to BIOS and load "load optimized default".
- 2. Check website for any BIOS update.
- 3. If still has the problem, remove all other add-on cards except CPU/ Memory/ Video card/Hard disk. See if you can finish Windows installation. Then put peripherals in one by one to identify which one cause the lockup.

My system will not boot-up when I set my CPU to 133MHz FSB, works with 100MHz FSB

- 1. Make sure to put some thermal paste above the CPU.
- 2. CPU might be defective.

BIOS Issue

Where can I find the BIOS revision of my mainboard?

It will be displayed on the up-left corner on the screen during boot-up. It will show as your board type followed by the revision number, such as kvxa_2BA1 (meaning BIOS revision 2BA1 for the SY-K7V Dragon plus! board) or 6BA+IV_2AA2 which means SY-6BA+IV motherboard with 2AA2 BIOS.

Where can I find the latest BIOS of my motherboard?

Please go to the technical support page of one of the SOYO websites (Taiwan: www.soyo.com.tw), and look up your motherboard to find the latest BIOS revision.

How can I flash the BIOS?

- 1. Download the BIOS on our support website.
- 2. Make a bootable floppy disk with out any memory manager loaded (i.e. himem, emm386, etc...).
- 3. Copy the BIOS file and awdflash utility to the diskette.
- 4. Type "awdflash biosname.bin/sn/py".
- Then reboot.

After flashing the BIOS, my system will not boot-up.

- 1. Try clearing the CMOS.
- The BIOS chip is defected due to unsuccessful flash, contact your nearest SOYO branch for re-flashing.

Is there a way to reprogram my BIOS after an unsuccessful flash?

No other way, you need to send back the BIOS ROM to your nearest SOYO branch for re-flashing.

I'm using a 133MHz FSB CPU, I cannot find the DDR 100MHz option in the BIOS, why?

The DDR speed should not be lower than the CPU FSB speed.

VGA Issue

I cannot set my VGA to go higher than 16 color (640x 480).

- 1. Make sure that you have installed the VIA4 in 1 driver.
- 2. Install/re-install the VGA driver.

After wake-up from Suspend to RAM or Standby mode, the screen has no display but I can hear the hard disk operating

- 1. Install VIA4 in 1 driver.
- 2. Check the VGA card manufacturer for driver update, or make sure the VGA card support Suspend to Ram function.

Audio Issue

How can I disable the on-board Audio?

Go to the SOYO Combo Feature in the BIOS setup, then set the "onboard 6CH H/W audio" to disable.

I cannot get the sound working on my system.

- 1. Check if the speaker wire is connected to the line out connector in the M/B.
- 2. Check if the speaker power is powered on.
- 3. Install the audio driver supplied on our driver disc.
- 4. Check BIOS setup if "onboard 6CH H/W audio" is enabled.
- 5. If sound already installed, check our website for audio driver update.

I cannot get the sound working on the 5.1 channel speaker.

- 1. Install the audio driver and application. Check driver installation for more info.
- 2. Check if the settings in the 5.1 speaker control box are correct, like if you have a SPDIF connector but the setup in the speaker box is set to analog.
- 3. Check if the speaker connection to the M/B is correct.
- 4. Make sure the software setup is correct. Check manual for more info.

The sound is working in my system, but when I play CD music from the CD-ROM, I do not get any sound. What is wrong?

This is because the 3-wire audio cable from the CD-ROM to the on-board CDIN1 connector in the M/B is not connected. See manual for location of CDIN1

The sound from my sound card is distorted when Windows start. What is wrong?

If you are using an ISA sound card, please make sure the IRQ needed for the sound card is set to 'Legacy ISA' in the BIOS. In other word, if your ISA sound card takes IRQ5, then set IRQ5 to 'Legacy ISA'.

The sound and everything else works fine except that the recorder and microphone do not work. What is wrong?

- Please go to sound properties and check if the recorder and microphone in the are enabled.
- 2. Check if Microphone is ok.

Hard disk/FDD/CD-ROM issue

My Western digital HDD is not detected during boot-up

Change the jumper settings to cable select or single.

Sometimes the system finds my CD-ROM, sometimes not

- 1. Check CD-ROM if it is working properly.
- The power supply might not have enough wattage to support all the peripherals. If your system has other peripherals connected, like CD-RW, extra HDD, etc. disconnect them.

When I boot up my new computer I got "floppy boot failure" and the LED on the floppy stays on

Make sure the red wire of floppy ribbon cable goes to Pin1 on the floppy drive side (don't trust the "key lock" or "notch") and use the end-connector of the cable (don't use middle one).

LAN Issues

During LAN driver installation, the system hangs on 75%, why?

Enable the onboard LAN in the BIOS setup.

I have problem installing Novell NetWare v.50

Disable the APIC option in the BIOS.

For updated FAQs, please check http://www.soyousa.com/faqs.html

How to contact us:

- If you are interested in our products, please contact the SOYO sales department in the region you live.
- If you require Technical Assistance, please contact our Technical Support in the region you live.

SOYO prefers Email as communication medium, remember to *always add to the email the* country that you live in.

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